

METHOD FOR UNPATTERNED RESIST ETCH BACK  
OF SHALLOW TRENCH ISOLATION REFILL INSULATOR

ABSTRACT OF THE DISCLOSURE

5 A method for forming shallow trench isolation  
structures is provided that includes forming a plurality of  
isolation trenches (32) in a substrate (10) where the  
isolation trenches (32) separate active areas (18). An  
insulation layer (44) is formed outwardly from the  
substrate (10) with the insulation layer (44) filling the  
isolation trenches (32) and covering the active areas (18).  
A planarization layer (46) is formed outwardly from the  
insulation layer (44). The planarization layer (46) and  
the insulation layer (44) are removed together at a  
substantially even rate down to a polish stop (14) outward  
from the active areas (18).  
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